

AMENDMENTS TO THE SPECIFICATION

Please delete the paragraph beginning on page 2, line 16, and replace with the following paragraph:

The immunologically reactive substance(s) can be one or more of the *Borellia burgdorferi* epitope polypeptides we discovered: VQEGVQQEGAQQP-(beta-A)(beta-[[4]]A)C;
 EIAAKAIGKKIHQNNG-(beta-A)(beta-A)C; ISTLIKQKLDGLKNE-(beta-A)(beta-A)C;
~~PWAESP~~PKKPEPVVAESP~~KKPE~~-(beta-A) (beta-A)C; DKKAINLDKAQQKLD-(beta-A)(beta-A)C;
 ITKGKSQKSLGD-(beta-A)(beta-A)C; and GMTFRAQEGAFITG-(beta-A) (beta-A)C.

Alternatively, one could use as antigen the nucleic acid coding for one or more of these epitopes.

Using such an epitope enables one to make an apparatus for isolating anti-*Borellia burgdorferi* antibody (*i.e.*, a Lyme disease test kit), a vaccine, or a therapeutic. Similarly, the nucleic acid sequences coding for these polypeptides may be useful as antigen, or to make large quantity of polypeptide.

Please delete the table entitled "Table 1" beginning on page 14, line 16, and replace with the following table:

Table 1
Synthesized Epitopes

Peptide	Sequence	
FLA, AA 211-223	VQEGVQQEGAQQP-(beta-A)(beta-[[,4]]A)C	1639.8
OspC2, AA71-86	EIAAKAIGKKIHQNNG-(beta-A)(beta-A)C	2274.3
OspC3, AA 104-118	ISTLIKQKLDGLKNE-(beta-A)(beta-A)C	2282.3
OspC10, AA 198-207	<u>PWAESP</u> KKPE <u>PVVAESP</u> KKPE -(beta-A)(beta-A)C	1762.7
P83-1, AA296-310	DKKAINLDKAQQKLD-(beta-A)(beta-A)C	2310.3
P83-3, AA431-442	ITKGKSQKSLGD-(beta-A)(beta-A)C	1843.8
P39, AA129-142	GMTFRAQEGAFITG-(beta-A)(beta-A)C	2067.9